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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,266	10/23/2001	Prathima Agrawal	APP 1290	2272
9941	7590	09/02/2005	EXAMINER	
TELCORDIA TECHNOLOGIES, INC. ONE TELCORDIA DRIVE 5G116 PISCATAWAY, NJ 08854-4157			SOL, ANTHONY M	
			ART UNIT	PAPER NUMBER
			2662	
DATE MAILED: 09/02/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/045,266

Applicant(s)

AGRAWAL ET AL.

Examiner

Anthony Sol

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 12-21 and 23 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 10 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5, 12-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5,

The term "approximately" in claim 5 is a relative term, which renders the claim indefinite. The term "approximately" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

4. Regarding claims 12-16,

Claim 12 depends on itself.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

Art Unit: 2662

351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 17, 19, 21, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,725,047 B1 ("Farley").

Regarding claims 1, 17, 19,

Farley discloses that in an Internet application, a cell site server 120a of Fig. 1 can be associated with a predetermined number of IP addresses (Col. 3, lines 58-60; Claim 1 - determining a total Internet Protocol address pool for the wireless cell; Claim 17 - an IP address server which determines a total Internet Protocol address pool for a wireless call; Claim 19 - an IP address server which determines a total Internet Protocol address pool for each of a plurality of wireless cells).

Farley further discloses that one (group) of the addresses is associated with a "tunnel" function. The other addresses can be associated with subscribers on a dynamic basis (Col. 3, lines 60-63; Claim 1 - partitioning the Internet Protocol address pool into groups of address spaces for use with an associated user group within the wireless cell; Claim 17 - a partitioned address pool of groups of address spaces for use with an associated user group within the cell; Claim 19 - for each of a plurality of partitioned address pools of groups of address spaces for use with an associated group within the cell).

Farley shows in Fig. 2 a flow chart depicting a method of assigning a wired-network address (IP address). The mobile station transmits a request for a wired-

network address to the address server (step 201). At step 202, the address server identifies, from its database, an unoccupied address associated with the originating cell site (Col. 4, lines 20-21, 29-31; Claim 1 - monitoring IP address demands associated with the wireless cell; Claim 17 – the server monitors IP address requests associated with the wireless cell; Claim 19 – plurality of servers monitors IP address requests associated with each of the plurality of wireless cells).

Farley further shows in Fig. 2, step 204, where the address server 150 (Fig. 1) transmits the address to the cell-site server, identifying it as being assigned to the subscriber. The cell-site server 120a then stores information associating this wired-network address with a specific subscriber at step 205 (Col. 4, lines 32-36; Claim 1 - updating the groups of address spaces using an IP server; Claim 17 – updates the groups of address spaces based on the IP address requests; Claim 19 – update the groups of address spaces based on the IP address requests).

7. Regarding claim 2,

Farley discloses a method that covers all the limitations of the parent claim.

Farley discloses that database 503 of Fig.5 can include a predetermined number of wired network addresses (IP addresses). It is inherent that some type of predictive analysis was performed to arrive at the predetermined number (Col. 5, lines 63-65; performing a predictive analysis to allocate Internet Protocol address space for the associated user group within the wireless cell).

8. Regarding claim 21,

Farley discloses that in an Internet application, a cell site server 120a of Fig. 1 can be associated with a predetermined number of IP addresses (Col. 3, lines 58-60; an IP address server which determines a total Internet Protocol address for the wireless cell for use with an associated user group within the cell).

Farley discloses that database 503 of Fig. 5 can include a predetermined number of wired network addresses (IP addresses). It is inherent that some type of predictive analysis was performed to arrive at the predetermined number (Col. 5, lines 63-65; performs a predictive analysis to determine a required Internet Protocol address pool for the wireless cell).

Farley shows in Fig. 2 a flow chart depicting a method of assigning a wired-network address (IP address). The mobile station transmits a request for a wired-network address to the address server (step 201). At step 202, the address server identifies, from its database, an unoccupied address associated with the originating cell site (Col. 4, lines 20-21, 29-31; the server monitors IP address requests associated with the wireless cell).

Farley further shows in Fig. 2, step 204, where the address server 150 (Fig. 1) transmits the address to the cell-site server, identifying it as being assigned to the subscriber. The cell-site server 120a then stores information associating this wired-network address with a specific subscriber at step 205 (Col. 4, lines 32-36; updates the groups of address spaces based on the IP address requests).

9. Regarding claim 23,

Farley discloses that in an Internet application, a cell site server 120a of Fig. 1 can be associated with a predetermined number of IP addresses (Col. 3, lines 58-60; base stations comprising an IP address pool and an IP address server wherein the IP server determines a total Internet Protocol address pool for the wireless cell for use with an associated user group within the cell).

Farley discloses that database 503 of Fig.5 can include a predetermined number of wired network addresses (IP addresses). It is inherent that some type of predictive analysis was performed to arrive at the predetermined number (Col. 5, lines 63-65; performs a predictive analysis to determine a required Internet Protocol address pool for the wireless cell).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title; if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farley in view of Pub. No. US 2002/0049058 A1 ("Tee").

Farley discloses a method that covers all the limitations of the parent claim.

Farley does not disclose that the predictive analysis is performed using a moving weighted mean average.

Tee discloses that a drop timer database can be used in soft handoff. The database can be updated when a new T\_TDROP value is reported by an MS. The T\_TDROP value for a certain handoff region and mobility class can be updated by computing the moving average for example. Other methods can also be used to update the database entries, such as exponential-weighted moving average and simple mean for a certain number of samples (Pg. 5, paragraph 42, lines 1-3, 11-12 and paragraph 43, lines 1-8; predictive analysis is performed using a moving weighted mean average).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to modify the predictive analysis as taught by Farley to perform a moving weighted mean average as taught by Tee to improve the overall performance of the network in handoffs (Pg. 5, paragraph 42, lines 11-12). One skilled in the art would have been motivated to combine Farley with Tee (collectively "Farley-Tee") to generate the claimed invention with a reasonable expectation of success.

12. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farley in view of Tee, and in further view of Pub. No. US 2003/0033541 A1 ("Edmark").

Regarding claim 4,

Farley-Tee discloses a method that covers all the limitations of the parent claim.



Farley-Tee does not disclose recording an average number of requests from hosts in each user group and computing an average number of total IP addresses over a suitable fixed period of time.

Edmark discloses a server that screens incoming requests. The screen may be for items such as IP addresses and requested resources. Or it could be for indicia based on time of day, number of requests by a single IP address, or numbers of requests for one or more pieces of information (Pg. 3, paragraph 35; recording an average number of requests from hosts in each user group and computing an average number of total IP addresses over a suitable fixed period of time).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to modify the moving weighted average as taught by Farley-Tee to include IP addresses and request for resources and indicia based on time of day as taught by Edmark so that network resources can be efficiently allocated. One skilled in the art would have been motivated to combine Farley-Tee with Edmark (collectively "Farley-Tee-Edmark") to generate the claimed invention with a reasonable expectation of success.

Regarding claim 5,

Farley-Tee-Edmark discloses a method that covers all the limitations of the parent claim.

Edmark discloses a server that screens incoming requests. The screen may be for items such as IP addresses and requested resources. Or it could be for indicia based on time of day, number of requests by a single IP address, or numbers of

Art Unit: 2662

requests for one or more pieces of information. Claim 5 further limits the suitable fixed period of time of claim 4 to be approximately 10 minutes. However, if no unexpected results occur by adjusting the suitable fixed period to 10 minutes, then adjusting such variable would be considered within the level of one skilled in the art (Pg. 3, paragraph 35; suitable fixed period of time is approximately 10 minutes).

13. Claims 6, 9, 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farley in view of Patent No. 6,888,803 B1 ("Gentry").

Regarding claims 6, 9, 18, 20,

Farley discloses a method and system that covers all the limitations of the parent claim.

Farley does not disclose that the user group is one of wireless handoff terminal, a resident terminal, and a wired terminal.

Gentry discloses a mobility gatekeeper that is responsible for establishing connections and providing a platform for network mobility services. The IP address of the serving switch is stored in the mobility gatekeeper and can be included in the registration acknowledgement to the serving base station controller or base station controller gateway. This gives the ability to provide integrated business services between wireline and wireless subscribers, regardless of the current location of the wireless subscribers in the network, including hand-off for mobiles, which can be performed within the mobility gatekeeper (Col. 2, lines 54-55, Col. 3, lines 5-8, lines 21-24, lines 31-32; Claim 6 - user group is one of a wireless handoff terminal, a resident

Art Unit: 2662

terminal and a wired terminal; Claim 9 – classifying user groups within the cell into handoff hosts and dormant hosts; Claim 18 – wireless IP address agent residing in a wireless network wherein the wireless IP agent handles requests for IP addresses from wireless terminals, categorizes the wireless terminal as a handoff or a resident host, and forwards the IP address associated requests with the handoff hosts or the resident hosts to the IP address server; Claim 20 – a plurality of IP address agents residing in a wireless network wherein each of the wireless IP address agents handle requests for IP addresses from a plurality of wireless terminals, categorizes each wireless terminal as a handoff or a resident host, and forwards the IP address requests associated with the handoff hosts or the resident hosts to the IP address server).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to modify the user group of Farley to include a wireless handoff and resident subscribers as well as a wired subscribers as disclosed by Gentry so that a subscriber can receive integrated services regardless of whether he is a wireline or wireless user as he moves from one location to another (Col. 3, lines 21-24). One skilled in the art would have been motivated to combine Farley with Gentry (collectively "Farley-Gentry") to generate the claimed invention with a reasonable expectation of success.

***Allowable Subject Matter***

14. Claims 7, 8, 10, 22 are objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Claim 11 is allowed.

16. Claims 12-16, which <sup>presumably</sup> depend from claim 11, would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Sol whose telephone number is (571) 272-5949. The examiner can normally be reached on M-F 7:30am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

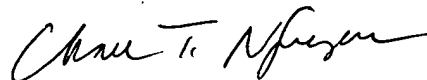
Art Unit: 2662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*AMS*

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8/30/2005



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